Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

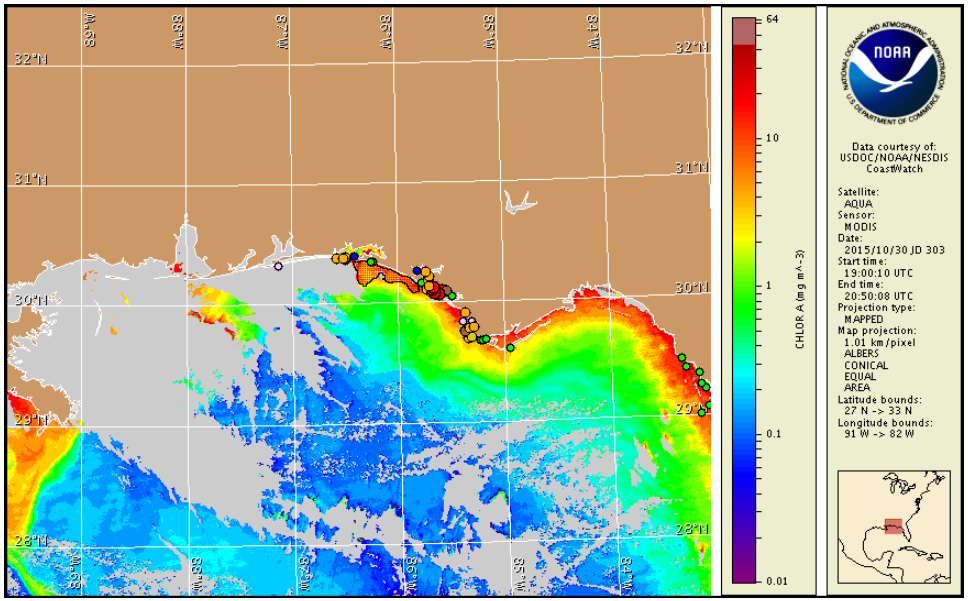
Monday, 02 November 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 29, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 23 to 30: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide: http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest Florida from Escambia to Taylor counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for alongshore northwest Florida Monday, November 2 to Thursday, November 5 is listed below:

County Region: Forecast (Duration)
Escambia County: High (M, Th), Low (Tu-W)
Santa Rosa County: High (M, Th), Low (Tu-W)
Okaloosa County: Moderate (M, W, Th), Very Low (Tu)
Okaloosa County, bay regions: Moderate (M-Th)
Walton County: High (M, Th), Moderate (Tu-W)
Bay County: Moderate (M), Low (Tu-W), Very Low (Th)
Bay County, bay regions: High (M-Th)
Gulf County: Moderate (M), Low (Tu), Very Low (W-Th)
Gulf County, west bay regions-St. Joseph Bay area: Moderate (M, W-Th), Low (Tu)
All Other NWFL County Regions: None expected (M-Th)
SWFL County Regions: Visit http://tidesandcurrents.noaa.gov/hab/#swfl

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Respiratory irritation has been reported from Escambia and Okaloosa counties. Fish kills have been reported in several areas along northwest Florida from Escambia to Bay counties.

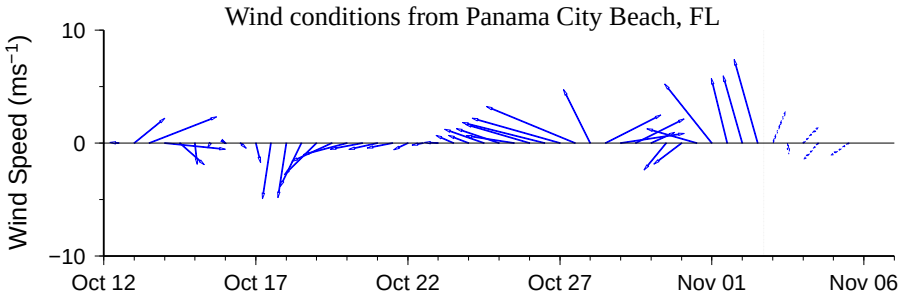
Analysis

Recent samples collected over the past week alongshore northwest Florida continue to identify background to 'high' *Karenia brevis* concentrations alongshore Escambia to Gulf counties, with the highest concentrations identified in St. Andrews Bay of Bay County (FWRI; 10/28-29). Reports of respiratory irritation and fish kills continue to be reported from Pensacola Beach in Escambia County where recent sampling has only identified up to 'background' *K. brevis* concentrations, additional sampling of this region is recommended (FWRI, MML; 10/26-11/2). Reports of respiratory irritation also continue to be received from Okaloosa County where up to 'medium' *K. brevis* concentrations were detected last week (FWRI, MML; 10/28-11/2). Large fish kills have been reported along northwest Florida in several areas in Santa Rosa, Okaloosa, Walton, and Bay counties, including the bay regions of Escambia and Santa Rosa counties where no sampling has been received; sampling of these regions is recommended (FWRI; MML, 10/28-11/2). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus.

Recent ensemble imagery (MODIS Aqua, 10/30), is completely obscured by clouds from Escambia to Walton County, preventing analysis in this region. Patches of elevated to very high chlorophyll (2 to >20 μg/L) with the optical characteristics of *K. brevis* are visible along- and offshore northwest Florida from Walton to Gulf County.

Southeast winds over the last several days alongshore northwest Florida may have minimized the transport of *K. brevis* concentrations. Variable winds forecast today through Thursday may continue to minimize transport of *K. brevis* concentrations.

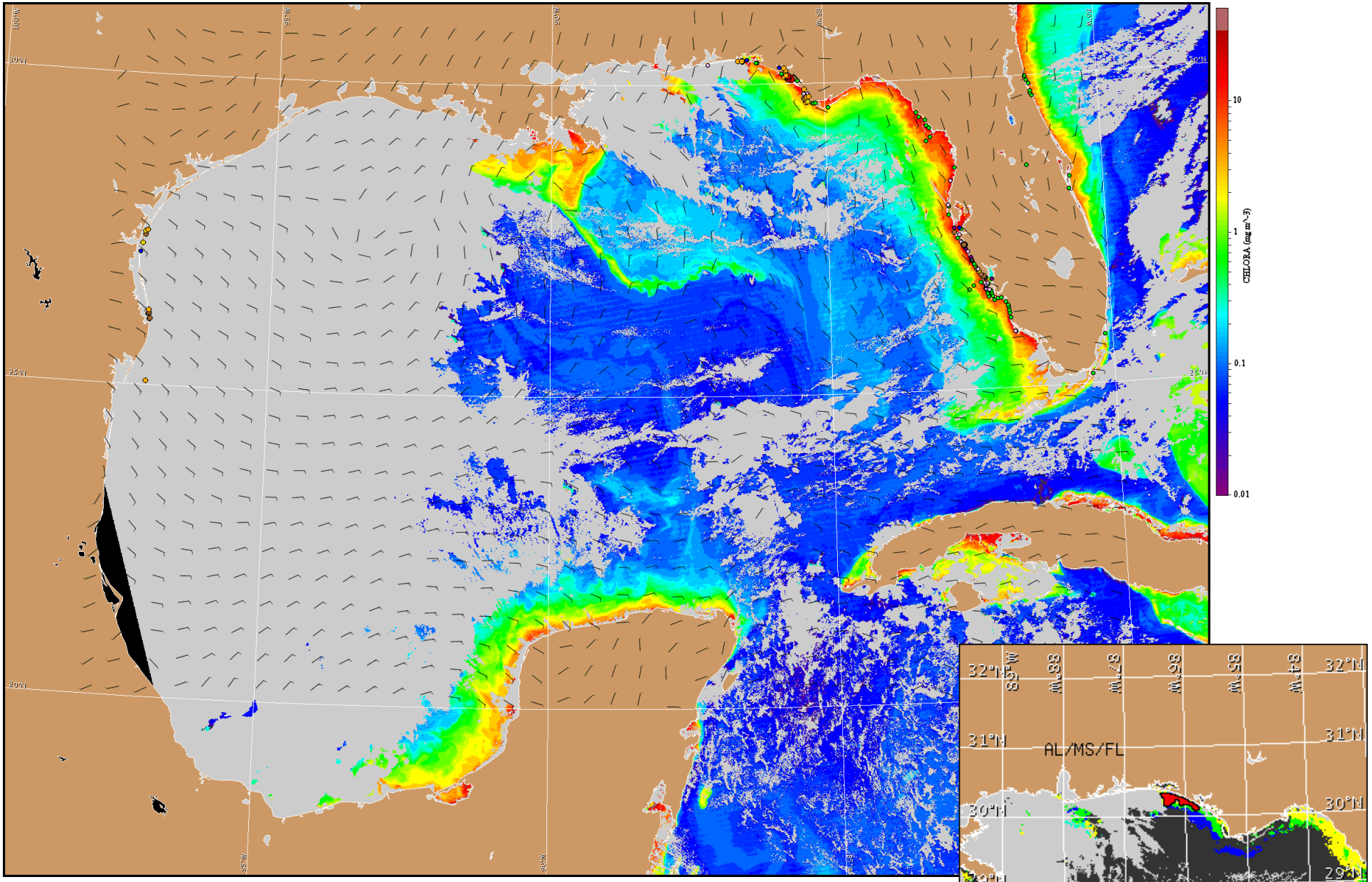
Davis, Lalime



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Escambia to Taylor counties: South to southwest winds (10-20kn, 5-10m/s) today becoming west to northwest winds (5-10kn, 3-5m/s) tonight. North to northeast winds (5kn, 3m/s) Tuesday becoming east winds (5-10kn) Tuesday night through Wednesday. Southeast winds (10kn, 5m/s) Thursday.



Satellite chlorophyll image and forecast winds for November 3, 2015 12Z with points representing cell concentration sampling data from October 23 to 30: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:
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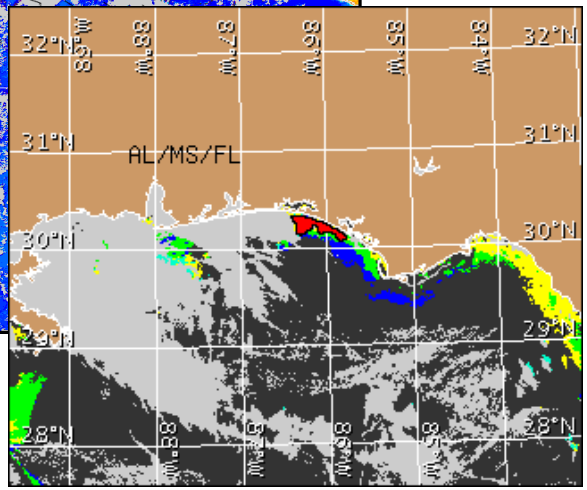

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).